Politics vs Technology: the Twists and Turns of Open Access

Stevan Harnad
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UQAM



Four Cognitive Revolutions:

Speaking (fast turnaround time)

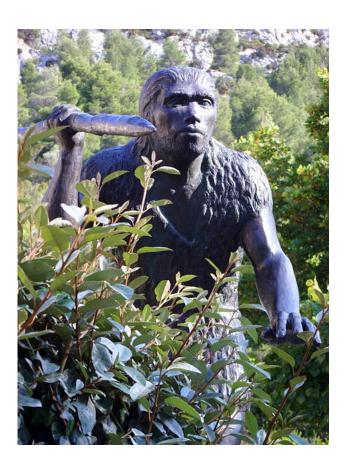
Handwriting (slow turnaround time)

Print (slow turnaround time)

Skywriting (fast turnaround time)

Revolution #1: 300,000 Years ago:

The Advent of Language (words were free)



Revolution #2: 6000 years ago

The Advent of Handwriting



Web Science Institute Seminar

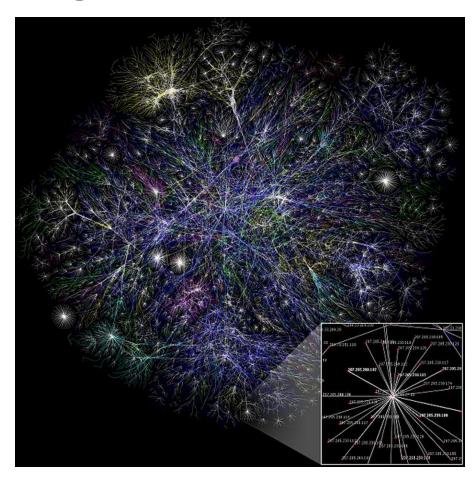
Revolution #3: 600 years ago: Print

Spoken interactions are *online cognition*; written

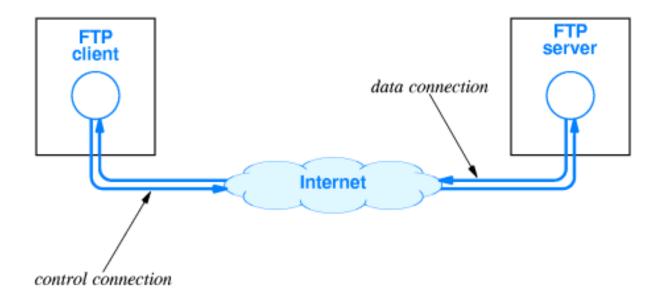
interactions are offline cognition.



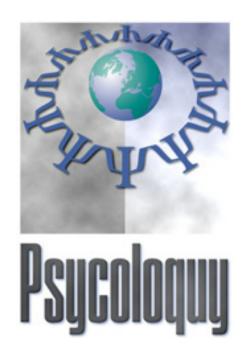
Revolution #4: 50 yrs ago: Internet



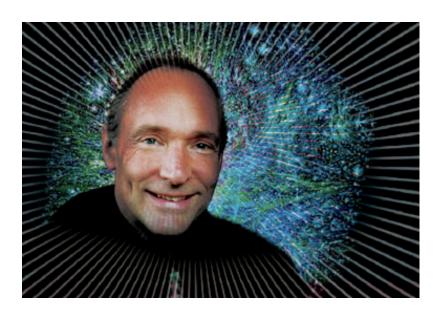
FTP: 1960's (Computer scientists began sharing papers by depositing them in anonymous FTP archives:



1989 – 2002 Psycologuy (one of earliest Gold OA journals)

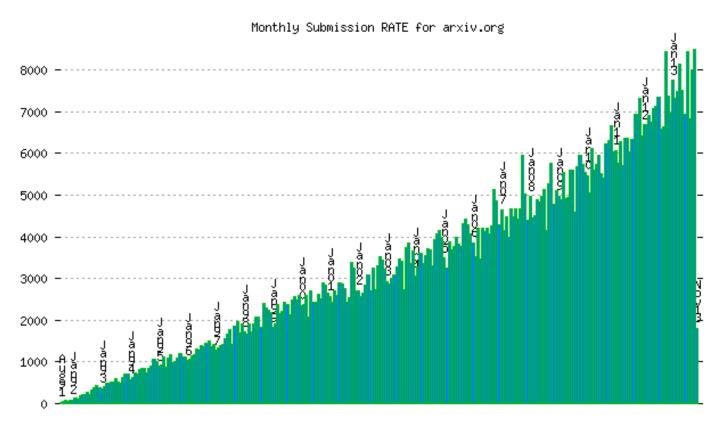


24 years ago: the Web



Arxiv 1991

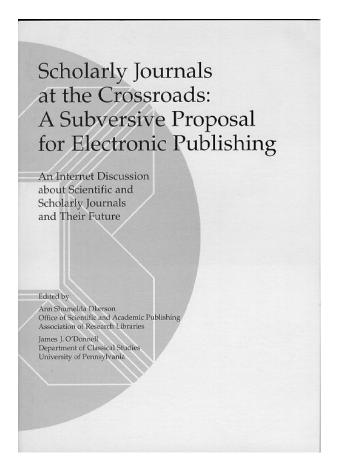
(physicists have been depositing – no questions asked – for nearly a quarter century now)



First 22.3 years (7 Nov '13 total = 889,450)

Jun 1994 – Subversive Proposal

(authors should self-archive the final, refereed, accepted drafts of their journal articles, free for all online = "it's raining, boys and girls, time to put on your raincoats.")



Jan 1996 – JISC ELiB Cogprints Project (Matt Hemus)



Sep 1998 – American Scientist Open Access Forum (Amsci) (now the Global Open Access Forum (GOAL)



Oct 1999 - EPrints announced

(Rob Tansley, later Chris Gutteridge)



Jan 2000 – First EPrints repository goes live (eprints.ecs.soton.ac.uk)



Dec 2001 - Budapest Open Access Initiative (BOAI)

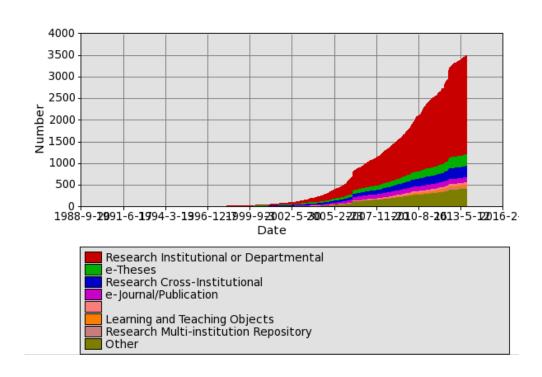


Feb 2002 – International meeting on National Policies on Open Access

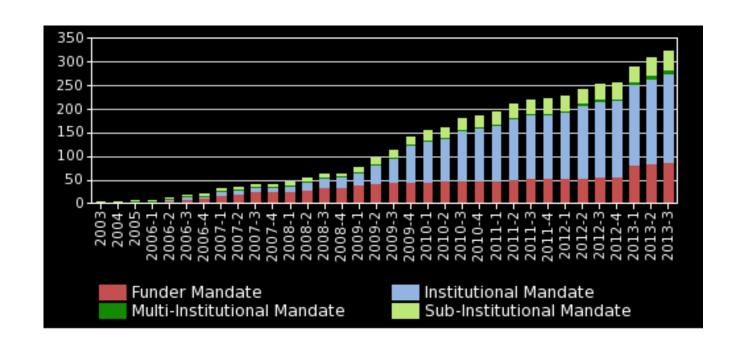
invitation-only international meeting, joined by a major group of Pro-VCs and institutional digital information managers from Australia



2003 -- ROAR Registry of Open Access Repositories (Tim Brody)



2003 – ROARMAP Registry of Open Access Repository Mandatory Archiving Policies





Jan 2003 – ECS Open Access mandate (world's first OA mandate) (Wendy Hall)

ROARMAP

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University of Southampton: School of Electronics and Computer Science

University of Southampton: School of Electronics and Computer Science (05 Feb 2003)

INSTITUTION or FUNDER URL: http://www.ecs.soton.ac.uk/

MANDATE URL and TEXT

Aug 2004 – Joint Southampton OA Recommendation to Parliamentary Select Committee

Les Carr, Dave DeRoure, Stevan Harnad, Jessie Hey, Tony Hey, Steve Hitchcock (Southampton)
Charles Oppenheim (Loughborough)

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House of Commons H	House of Lords What's o	n Bills & legislation	Committees	Publications & records	Parliament TV	News
	ome page > Parliamentary b es > Science and Technology			mittee Publications > All Sel	ect Committee Publi	cations >
Select Committee on	Science and Technolog	y Tenth Report				
						-

Summary

Academic libraries are struggling to purchase subscriptions to all the journal titles needed by their users. This is due both to the high and increasing journal prices imposed by commercial publishers and the inadequacy of library budgets to meet the demands placed upon them by a system supporting an ever increasing volume of research. Whilst there are a number of measures that can be taken by publishers, libraries and academics to improve the provision of scientific publications, a Government strategy is urgently needed.

This Report recommends that all UK higher education institutions establish institutional repositories on which their published output can be stored and from which it can be read, free of charge, online. It also recommends that Research Councils and other Government funders mandate their funded researchers to deposit a copy of all of their articles in this way. The Government will need to appoint a central body to oversee the implementation of the repositories; to help with networking; and to ensure compliance with the technical standards needed to provide maximum functionality. Set-up and running costs are relatively low, making institutional repositories a cost-effective way of improving access to scientific publications.



25 Feb 2004 QUT World's First Institution-Wide OA Mandate (Tom Cochrane)

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Queensland University of Technology

Queensland University of Technology (25 Feb 2004)

INSTITUTION or FUNDER URL: http://www.gut.edu.au/

Sep 2004 – OA Advantage Bibliography (Steve Hitchcock)



The Open Citation Project - Reference Linking and Citation Analysis for Open Archives

See also Papers produced by the project

The effect of open access and downloads ('hits') on citation impact: a bibliography of studies

Find your way through the bibliography

Selected topic ALERTboxes: OA impact biblio rapid reader | Reviews of OA impact studies

Latest additions

Studies with original data

Web tools for measuring impact | Comparative reviews

Background

The financial imperative: correlating research access, impact and assessment | Citation analysis, indexes and impact factors | Open access

Latest articles on OA impact

This update service is no longer available following the <u>closure</u> of Connotea. It may be resumed if a suitable alternative service is found.



2004 NIH OA Policy "Recommendation" (Upgraded to Mandate 2007)

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National Institutes of Health (NIH)

National Institutes of Health (NIH) (25 Dec 2007)

INSTITUTION or FUNDER URL: http://publicaccess.nih.gov/policy.htm

MANDATE URL and TEXT



Dec 21 2004 U Minho First University-Wide OA Mandate in Europe (Eloy Rodrigues)

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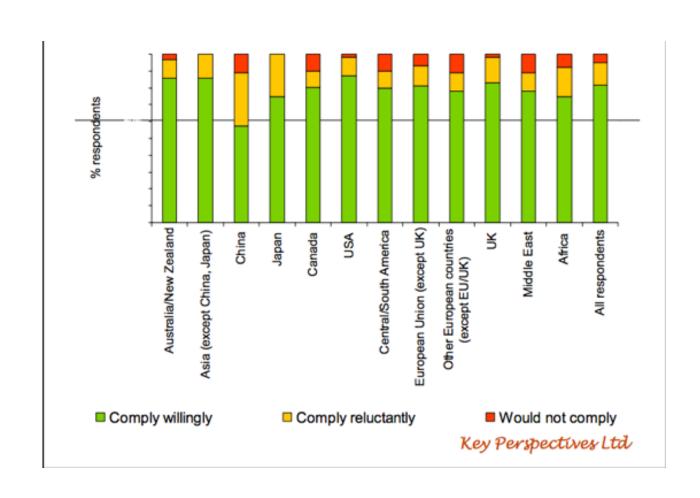
Universidade do Minho

Universidade do Minho (21 Dec 2004)

INSTITUTION or FUNDER URL: http://www.uminho.pt

MANDATE URL and TEXT

Swan & Brown 2005 Survey "would authors comply with Green OA mandates?"



Mar 2005 – Berlin 3 Open Access workshop, Southampton

Meeting Overview Program Outcomes Program Committee Location Registration Contacts Berlin Original **Declaration** Declaration Signatories Participants Attendees Speakers' Biographies Press OA Resources Sponsors

Berlin 3 Open Access:

Progress in Implementing the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities

Feb 28th - Mar 1st, 2005, University of Southampton, UK

Outcomes

Agreed Recommendation (emphasis added):

"In order to implement the Berlin Declaration institutions should implement a policy to:

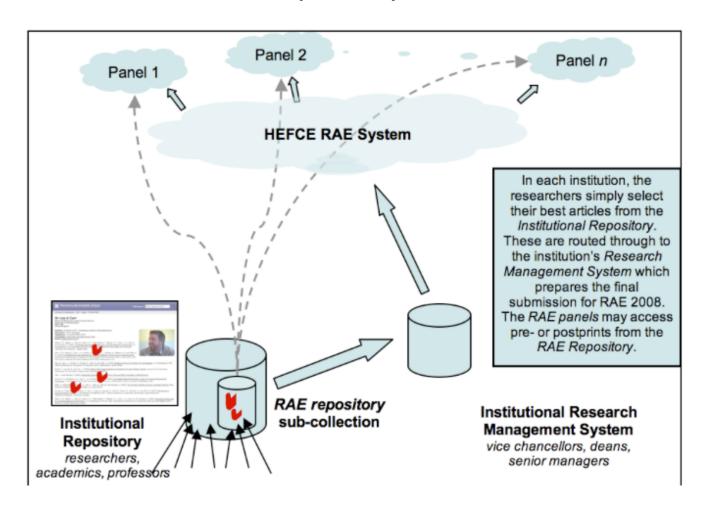
 require their researchers to deposit a copy of all their published articles in an open access repository

and

 encourage their researchers to publish their research articles in open access journals where a suitable journal exists (and provide the support to enable that to happen)."

Please register your institution's commitment to implementing an institutional self-archiving policy (and describe your policy) at http://www.eprints.org/signup/sign.php. Current list of institutions and policies: http://www.eprints.org/signup/fulllist.php.

Jun 2006 – Southampton Institutional Deposit Mandate for RAE items (Les Carr)







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Université de Liège (University of Liege)

Université de Liège (University of Liege) (11 Mar 2007)

INSTITUTION or FUNDER URL: http://www.ulg.ac.be/

MANDATE URL and TEXT

http://recteur.blogs.ulg.ac.be/?p=103



Jan 2008 – Southampton upgrades to full institutional mandate (but a very weak one)

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University of Southampton

University of Southampton (04 Apr 2008)

INSTITUTION or FUNDER URL: http://www.soton.ac.uk/

MANDATE URL and TEXT



Feb 2008 – Harvard A&S Mandate

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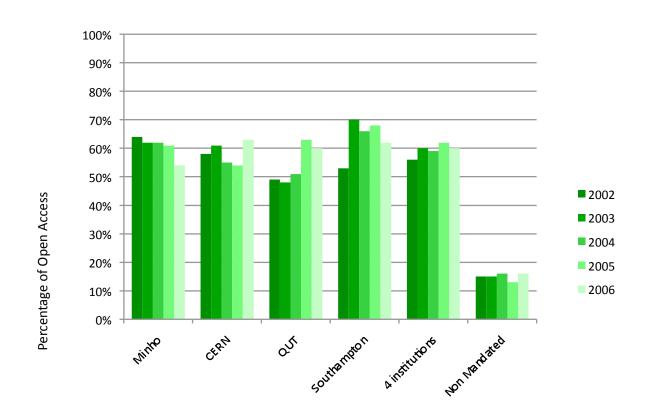
Harvard University: Faculty of Arts and Sciences

Harvard University: Faculty of Arts and Sciences (13 Feb 2008)

INSTITUTION or FUNDER URL: http://www.harvard.edu/

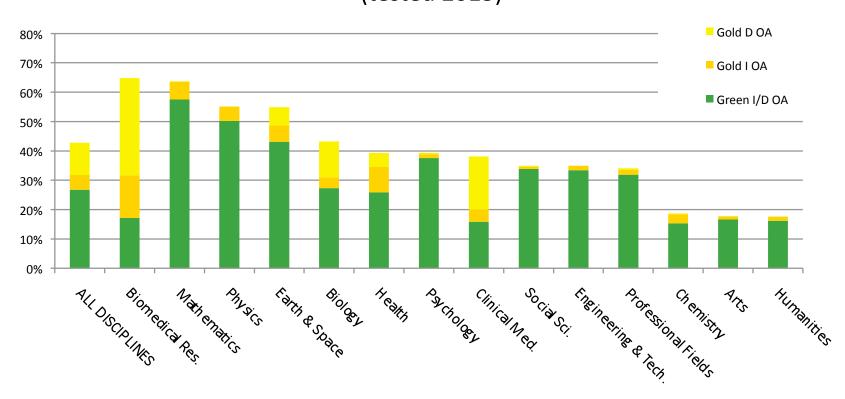
MANDATE URL and TEXT

Mandated (Minho, CERN, QUT, Soton ECS) vs Unmandated OA (2002-2006)



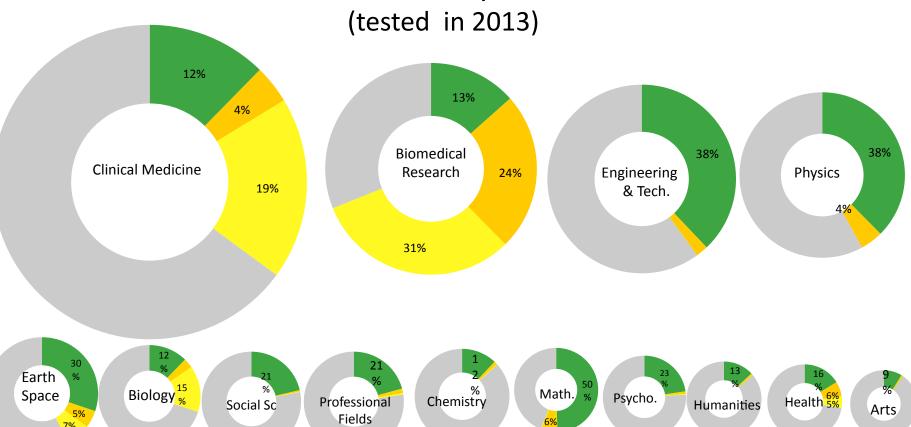
% UK OA Green (Immediate&Delayed), Gold (Immediate)) & Gold (Delayed)

ISI indexed UK articles published 2007-2012 (tested 2013)



% UK OA Green (Immediate&Delayed), Gold (I) & Gold (D)

ISI-indexed UK Articles published in 2012



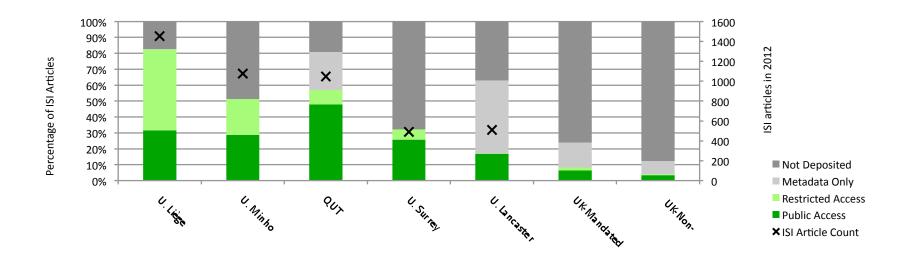
Green OA I&D: 21.1%

Gold OA I: 6% Gold OA D: 10.7%

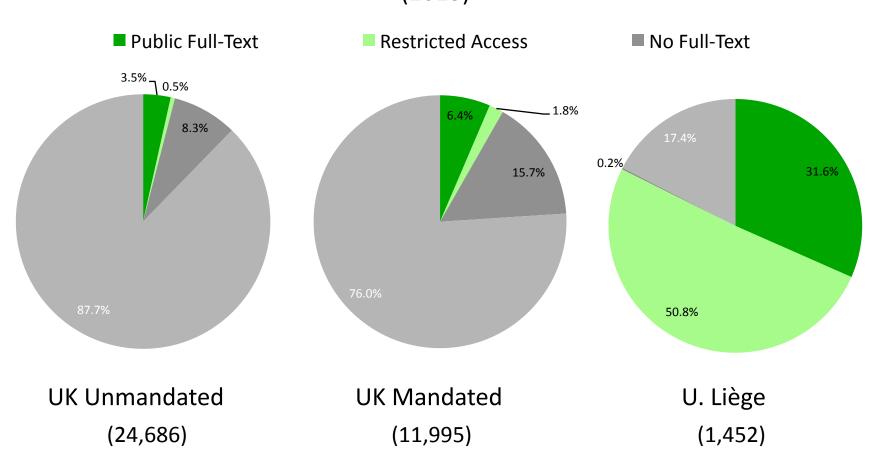
Total: 37.7%
Web Science Institute Seminar

Comparing Liege, Minho, QUT, Surrey, Lancaster, UK-mandated average & UK-unmandated average Liege immediate-deposit mandate is strongest and most effective mandate

(Minho & QUT are now both upgrading to the Liege immediate-deposit mandate)

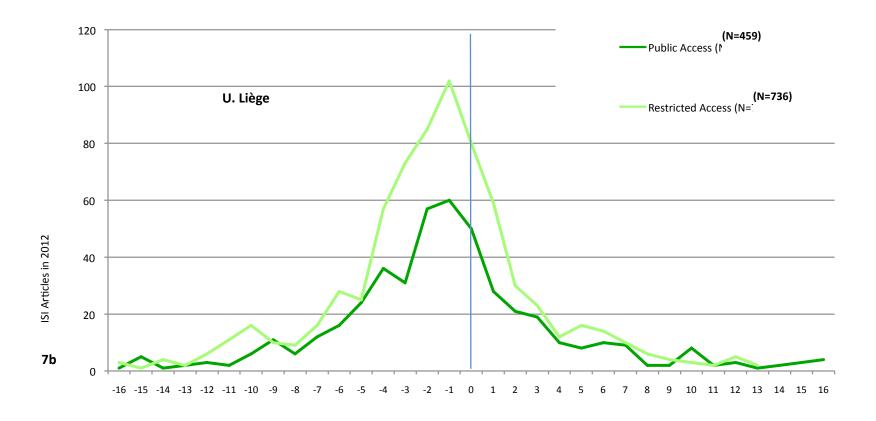


% Deposit of ISI-indexed published in 2012 UK vs U. Liège (2013)



Deposit Timing: Liège

(vertical line is date of publication)





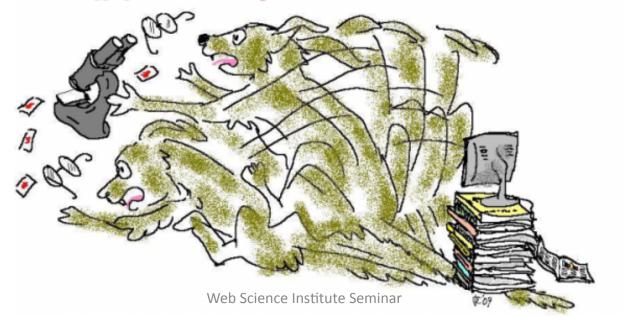
2012 The Finch Fiasco The UK's U-Turn from Cost-Free Green to Fool's Gold



Publishers lobbying against research institutions' and funders' efforts to mandate OA

is the
Publishing Tail
Wagging the Research Dog

Research and research institutions are not being funded by the tax-paying public as a service to the publishing industry







1. On policy

- **1.1**. Every **institution of higher education** should have a policy assuring that peer-reviewed versions of all future scholarly articles by faculty members are deposited in the institution's designated repository...
- Deposits should be made as early as possible, ideally at the time of acceptance, and no later than the date of formal publication.
- University policies should respect faculty freedom to submit new work to the journals of their choice. [emphasis added]
- University policies should encourage but not require publication in OA journals [emphasis added] ...
- **1.3.** Every **research funding agency**, public or private, should have a policy assuring that *peer-reviewed versions of all future scholarly articles* reporting funded research are deposited in a suitable repository and made *OA* as soon as practicable.
- Deposits should be made as early as possible, ideally at the time of acceptance, and no later than the date of formal publication...





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US White House Office of Science and Technology Policy (OSTP)

US White House Office of Science and Technology Policy (OSTP) (22 Feb 2013)

INSTITUTION or FUNDER URL: http://www.whitehouse.gov/administration/eop/ostp

MANDATE URL and TEXT



May 2013 -- FRS/FNRS Belgium Harmonized Funder+Institution Mandate (Liège Immediate-Deposit Model)

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FRS/FNRS Belgium

FRS/FNRS Belgium (26 May 2013)

INSTITUTION or FUNDER URL: http://www.frs-fnrs.be

MANDATE URL and TEXT



May 2013: HEFCE *Proposed* Mandate Immediate-Deposit for REF2020 (Liège/FNRS Model)

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Higher Education Funding Council of England (HEFCE)

Higher Education Funding Council of England (HEFCE) (06 May 2013)

INSTITUTION or FUNDER URL: http://www.hefce.ac.uk

MANDATE URL and TEXT

http://www.hefce.ac.uk/media/hefce/content/news/news/2013/open_access_letter.pdf

Optimizing OA Mandates

- #1 Who must make the paper OA? The author (not the publisher)
- **#2** Where must the paper be made OA? In the author's institutional repository (from which it can be automatically exported/harvested)
- #3 When must the paper be deposited? Immediately upon acceptance for publication
- #4 When must the paper be <u>made OA?</u> Preferably immediately, otherwise after publisher embargo

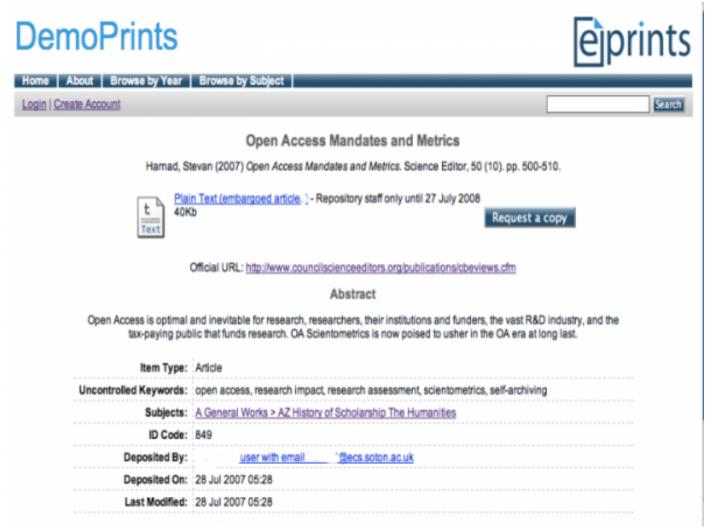
Open Access: How?

Universities and Funders adopt the ID/OA mandate:

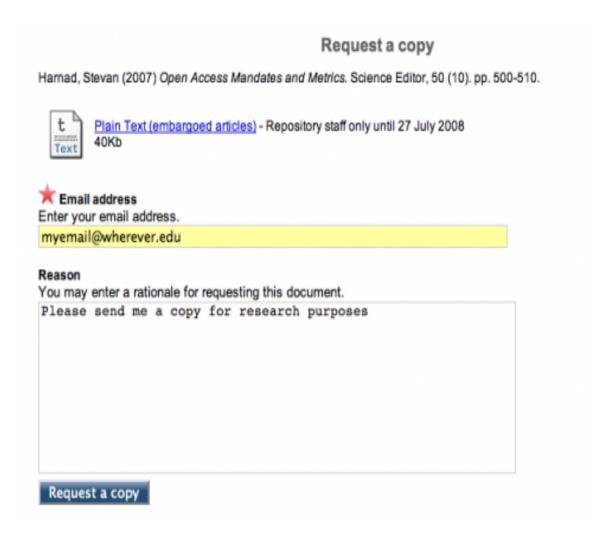
Immediate Deposit
+
Optional Access
+
Request a copy Button

(Sole mechanism for submitting for performance review or research funding)

For articles deposited as restricted access instead of open access, user can press the request a copy Button



To request a copy the user just pastes in their email address (and message, optional) and clicks



Authors receives immediate email and can click "Accept the request," in which case repository software automatically emails copy to requestor

From: DemoPrints XXX@ecs.soton.ac.uk

Date: July 28, 2007 12:51:43 AM EDT (CA)

To: XXX@ecs.soton.ac.uk

Subject: Request for "Open Access Mandates and Metrics"

Harnad, Stevan (2007) Open Access Mandates and Metrics. Science Editor, 50 (10). pp. 500-510._searted.txt

This item has been requested from DemoPrints by: myemail@wherever.edu.

The following reason was given:

"Please send me a copy for research purposes."

Please can you respond by clicking one of the following:

Accept the request (eprint will be emailed automatically)

Reject the request

(Please also consider removing the access restrictions so that your eprint is directly available to users without the need for these extra keystrokes.)

DemoPrints http://demoprints3.eprints.org/

Optimizing and harmonizing the Green OA Mandates of funders and institutions through immediate-deposit

- 1. When funders mandate immediate institutional repository deposit, this in turn recruits institutions to monitor and ensure timely compliance (and to adopt complementary institutional immediate-deposit mandates of their own)
- 2. Authors must do the deposit, not publishers: funder requirements bind fundees, not publishers, who have a conflict of interest with mandate compliance.
- 3. The 40% of publishers who embargo Green OA are attempting to hold OA hostage to sustaining their current inflated revenue levels, whether via subscriptions or via (pre-Green) "Fool's Gold" (over-priced, double-paid, and, if hybrid, double-dipped)
- 4. The immediate-deposit mandate + the Button maximize mandate compliance and minimize access delay and research impact loss as a result of publisher embargoes on Green OA
- 5. Immediate deposit and Green OA leave intact both the author's freedom of journal choice and the author's freedom to decide whether or not to pay for Gold
- 6. When immediate-deposit mandates have been adopted by institutions and funders globally, embargoes will become unsustainable, and Green OA will reach 100%
- 7. 100% Green OA will in turn make subscriptions unsustainable, so post-Green peer-reviewed journal publishing will be able to cut obsolete costs (print edition, online edition, access-provision, archiving, now all provided by Green OA repositories) and downsize to just providing peer-review alone, at a much-reduced Fair-Gold price, paid by authors' institutions out of a fraction of their windfall subscription cancellation savings.
- 8. Post-Green Fair-Gold OA publication will be affordable and sustainable, with all the re-use and license rights that users need and authors wish to provide.
- 9. But none of this will happen until and unless optimized, harmonized immediate-deposit mandates are adopted by funders and institutions worldwide.

- 1. (1994) A Subversive Proposal
- 2. (2001) The Self-Archiving Initiative
- 3. (2002) The Budapest Open Access Initiative
- 4. (2004) Memorandum to UK To UK Government Science and Technology Select Committee Select Committee on Science and Technology Written Evidence
- 5. (2004) For Whom the Gate Tolls? Select Committee on Science and Technology Written Evidence
- 6. (2007). No Need for Canadian PubMed Central: CIHR Should Mandate IR Deposit.
- 7. (2011) What Is To Be Done About U.S. Public Access to Peer-Reviewed Scholarly Publications Resulting From U.S. Federally Funded Research?
- 8. (2011) Comments on Open Access FAQ of German Alliance of Scientific Organisations
- 9. (2012) Digital Research: How and Why the RCUK Open Access Policy Needs to Be Revised
- 10. (2013). Response to HEFCE REF OA Policy Consultation.
- 11. (2013). Comments on HEFCE/REF Open Access Mandate Proposal.
- 12. (2013) Evidence to House of Lords Science and Technology Select Committee on Open Access
- 13. (2013) Evidence to BIS Select Committee Inquiry on Open Access.
- 14. (2013). Follow-Up Comments for BIS Select Committee on Open Access
- 15. (2013) Recommandation au ministre québécois de l'enseignement supérieur.
- 16. (2013) Comments on Canada's NSERC/SSHRC/CIHR Draft Tri-Agency Open Access Policy
- 17. Multiple Comments on CIHR Open Access Policy
- 18. Multiple Comments on <u>SSHRC Open Access Policy</u>
- 19. Multiple Comments on OA Progress in Canada
- 20. Multiple Comments on NIH Public Access Policy
- 21. Multiple Comments on <u>Harvard Open Access Policy</u>
- 22. Multiple Comments on France/HAL Open Access Policy
- 23. Multiple Comments on Australian Open Access Policy
- 24. Comments on H. Varmus's 1999 E-biomed Proposal [1] [2]
- 25. Harnad, S. (2007) <u>The Green Road to Open Access: A Leveraged Transition.</u> In: Anna Gacs. *The Culture of Periodicals from the Perspective of the Electronic Age*. L'Harmattan. 99-106.
- 26. Harnad, S. (2010) <u>No-Fault Peer Review Charges: The Price of Selectivity Need Not Be Access Denied or Delayed</u>. *D-Lib Magazine* 16 (7/8)